

#### ABSTRACT

An antenna device has a first radiation plate and a second radiation plate of which a diameter or one side is about  $1/2$  wavelength in electrical length disposed on a ground plate at an arbitrary interval. A first power feed port and a second power feed port are provided on the first radiation plate and are disposed so that straight lines linking each power feed port position and a middle point of the first radiation plate may be orthogonal to each other. A third power feed port and a fourth power feed port are provided on the second radiation plate and are disposed so that straight lines linking each power feed port position and a middle point of the second radiation plate may be orthogonal to each other. The straight lines are disposed to have an angle of 45 degrees to a straight line linking the first power feed port position and the middle point of the first radiation plate and to a straight line linking the second power feed port position and the middle point of the first radiation plate.